

**New Hampshire Department of Health and Human Services
Infectious Disease Surveillance Section**

Arboviral Surveillance Summary, 2013

Summary

The New Hampshire Department of Health and Human Services (NH DHHS) tested human, veterinary, and mosquito specimens for arboviruses in 2013. Testing performed at the NH Public Health Laboratories (PHL) identified West Nile virus (WNV) in one human, one horse, and 14 mosquito batches. Eastern Equine Encephalitis (EEE) virus was identified in three horses, and 24 mosquito batches. Given the continued arboviral activity detected during the 2013 season, NH DHHS encourages communities to maintain heightened levels of mosquito-borne disease education, surveillance, and control during 2014.

Table 1: Specimens Tested and Arboviral Test Results by Year, 2010-2013*

Species	2010			2011			2012			2013		
	Tested	WNV+	EEE+									
Mosquito Batches	2214	1	0	2733	9	0	4716	41	9	5316	14	24
Veterinary	8	0	1	6	0	0	11	0	4	28	1	3
Humans	32	1	0	44	0	0	37	1	0	34	1	0

*Comparison between years must consider variations in surveillance criteria.

Human Surveillance

Between January 1 and December 31, 2013, 34 patients were tested for EEE and WNV at the NH PHL. There was one WNV positive human (Chesterfield). No humans tested positive for EEE.

Animal Surveillance

Between January 1 and December 31, 2013, 28 veterinary specimens were tested for EEE and WNV at the NH PHL. Three horses (Derry, Deerfield, and Ossipee) tested positive for EEE. One horse (Belmont) tested positive for WNV.

Mosquito Surveillance

Between January 1 and December 31, 2013, 5316 mosquito batches were tested for EEE and WNV at the NH PHL. Fourteen batches tested positive for WNV across Hillsborough (4), Rockingham (9) and Cheshire (1) counties. The species testing positive were *Ochlerotatus canadensis* (1), *Culiseta melanura* (4), *Culex salinarius* (1), *Culex pipiens* (6), *Culex resutans* (1) and *Culex pipiens/restuans* (1). Twenty-four batches tested positive for EEE across Hillsborough (3) and Rockingham (21) counties. The species testing positive were *Culiseta melanura* (20), *Culiseta morsitans* (1) and *Coquillettidia perturbans* (3).

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Public Health Threat Declaration

A NH Public Health Threat Declaration based on arboviral activity was not made in 2013.

Regional Risk Levels

In 2013, the NH DHHS estimated human risk levels for defined “Focal Areas” in the State. “Focal Areas” may incorporate multiple municipalities and are based on integrating mosquito habitat, mosquito abundance, current and historic virus activity, and weather conditions needed to present risk of human disease. During the arboviral transmission season, estimated risk levels were announced to the public, local officials, and state partners through email, press releases, and postings to the NH DHHS website. NH DHHS updated the Risk Map weekly throughout the 2013 season to reflect ongoing arboviral surveillance. For 2013, risk levels across the state ranged from “Remote” to “High” depending on current and historical arbovirus detections. For more information on the arboviral test results and to view the final 2013 Risk Map, please visit: <http://www.dhhs.nh.gov/dphs/cdcs/arboviral/results.htm>.